



State of Washington
REPORT OF EXAMINATION
FOR WATER RIGHT CHANGE

File NR CG2-GWC1726
WR Doc ID 4237094

Changed Place of Use
Added or Changed Purpose of Use
Added or Changed Point of Withdrawal/Diversion

PRIORITY DATE
April 24, 1952

WATER RIGHT NUMBER
CG2-GWC1726

MAILING ADDRESS
NAPAVINE CITY
PO BOX 810
NAPAVINE WA 98065

SITE ADDRESS (IF DIFFERENT)

Total Quantity Authorized for Withdrawal or Diversion

WITHDRAWAL OR DIVERSION RATE
140

UNITS
GPM

ANNUAL QUANTITY (AF/YR)
105

Purpose

PURPOSE	WITHDRAWAL OR DIVERSION RATE			ANNUAL QUANTITY (AF/YR)		PERIOD OF USE (mm/dd)
	ADDITIVE	NON-ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	
Municipal	140		GPM	36		01/01 - 12/31
Municipal				69		5/1-9/30

REMARKS: This water right is associated with SWC5605 which is non-additive.

IRRIGATED ACRES		PUBLIC WATER SYSTEM INFORMATION	
ADDITIVE	NON-ADDITIVE	WATER SYSTEM ID	CONNECTIONS
		58200	

Source Location

COUNTY		WATERBODY		TRIBUTARY TO			WATER RESOURCE INVENTORY AREA	
LEWIS		GROUNDWATER					23-UPPER CHEHALIS	
SOURCE FACILITY/DEVICE	PARCEL	WELL TAG	TWP	RNG	SEC	QQ Q	LATITUDE	LONGITUDE
City of Napavine Well #6	018082001000	AFT345	13N	02W	09	SW NW	46.599108	-122.907275

Datum: NAD83/WGS84

Proposed Works

Well 8 inches in diameter and 379 feet deep.

Place of Use (See Attached Map)**LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE**

The place of use (POU) of this water right is the service area described in the most recent Water System Plan/Small Water System Management Program approved by the Washington State Department of Health, so long as the water system is and remains in compliance with the criteria in RCW 90.03.386(2). RCW 90.03.386 may have the effect of revising the place of use of this water right.

Development Schedule**BEGIN PROJECT**

Started

COMPLETE PROJECT

June 1, 2015

PUT WATER TO FULL USE

June 1, 2022

Measurement of Water Use

How often must water use be measured?

Monthly

How often must water use data be reported to Ecology?

Upon Request by Ecology

What volume should be reported?

Total Monthly Volume

What rate should be reported?

Annual Peak Rate of Withdrawal (gpm)

Provisions**Wells, Well Logs and Well Construction Standards**

All wells constructed in the state must meet the construction requirements of WAC 173-160 titled "Minimum Standards for the Construction and Maintenance of Wells" and RCW 18.104 titled "Water Well Construction". Any well that is unusable, abandoned, or whose use has been permanently discontinued must be decommissioned. Additionally, a well in disrepair that its continued use is impractical or is an environmental, safety or public health hazard must also be decommissioned.

All wells must be tagged with a Department of Ecology unique well identification number. If you have an existing well and it does not have a tag, please contact the well-drilling coordinator at the regional Department of Ecology office issuing this decision. This tag must remain attached to the well. If you are required to submit water measuring reports, reference this tag number.

Installation and maintenance of an access port as described in WAC 173-160- 291(3) is required.

Measurements, Monitoring, Metering and Reporting

An approved measuring device must be installed and maintained for each sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use". WAC 173-173 describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements.

Recorded water use data can be submitted via the Internet. To set up an Internet reporting account, contact the Southwest Regional Office. If you do not have Internet access, you can still submit hard copies by contacting the Southwest Regional Office for forms to submit your water use data.

Department of Health Requirements

Prior to any new construction or alterations of a public water supply system, the State Board of Health rules require public water supply owners to obtain written approval from the Office of Drinking Water of

the Washington State Department of Health. Please contact the Office of Drinking Water at Southwest Drinking Water Operations, 243 Israel Road S.E., PO Box 47823, Tumwater, WA 98504-7823, (360) 236-3030.

Water Use Efficiency

The water right holder is required to maintain efficient water delivery systems and use of up-to-date water conservation practices consistent with RCW 90.03.005.

Schedule and Inspections

Department of Ecology personnel, upon presentation of proper credentials, will have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

Proof of Appropriation

The water right holder must file the notice of Proof of Appropriation of water (under which the certificate of water right is issued) when the permanent distribution system has been constructed and the quantity of water required by the project has been put to full beneficial use. The certificate will reflect the extent of the project perfected within the limitations of the water right. Elements of a proof inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and satisfaction of provisions.

Findings of Facts

Upon reviewing the investigator's report, I find all facts, relevant and material to the subject application, have been thoroughly investigated. Furthermore, I concur with the investigator that water is available from the source in question; that there will be no impairment of existing rights; that the purpose(s) of use are beneficial; and that there will be no detriment to the public interest.

Therefore, I ORDER approval of G2-GWC1726 subject to existing rights and the provisions specified above.

Your Right To Appeal

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

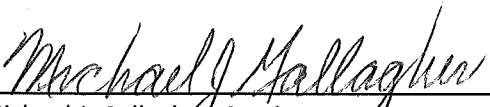
To appeal you must do the following within 30 days of the date of receipt of the Order.

File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.

- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.
- You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel RD SW Ste 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

Signed at Olympia, Washington, this 17th day of April 2012.



Michael J. Gallagher, Section Manager

For additional information visit the Environmental Hearings Office

Website: <http://www.eho.wa.gov>. To find laws and agency rules visit the Washington State Legislature

Website: <http://www1.leg.wa.gov/CodeReviser>.

INVESTIGATOR'S REPORT

Tammy Hall, Department of Ecology

Water Right Control Number CG2-GWC1726

BACKGROUND

On November 23, 2004, Steve Ashley, representing the City of Napavine, filed an *Application for Change of Water Right* to change the points of withdrawal, purpose of use, and place of use of Water Right Certificate (GWC) 1726.

GWC 1726 was issued January 14, 1954. It authorized 450 gallons per minute (gpm) and 114 acre-feet (ac-ft) per year for domestic supply, stockwater, and irrigation of 57 acres.

See Attachment #1

Attributes of the Existing Water Right and Proposed Change

Table 1. Attributes of Water Right Certificate (GWC) 1726 and Proposed Change

	Existing	Proposed
Name	Frank B. and Edith Hamilton	City of Napavine
Priority Date	April 24, 1952	
Change Application Date		11/23/2004
Instantaneous Rate	450 gpm	140 gpm
Annual Quantity	114 ac-ft	36 ac-ft (continuous use) 69 ac-ft (seasonal use, May 1 September 30)
Purpose(s) of Use	Irrigation Stockwater Domestic supply	Municipal Supply
Place(s) of Use	The west 519 feet of SE $\frac{1}{4}$ SW $\frac{1}{4}$, south of right of way, Section 14; NW $\frac{1}{4}$ SW $\frac{1}{4}$, south of right of way, Section 14; SW $\frac{1}{4}$ SW $\frac{1}{4}$, south of right of way, Section 14; N $\frac{1}{2}$ SE $\frac{1}{4}$, south of railroad, Section 15; NE $\frac{1}{4}$ NE $\frac{1}{4}$, east of river, Section 22, less 0.91 acre for road. All in T. 13 N., R 2 W.W.M.	The place of use (POU) of this water right is the service area described in the most recent Water System Plan/Small Water System Management Program approved by the Washington State Department of Health, so long as the water system is and remains in compliance with the criteria in RCW 90.03.386(2). RCW 90.03.386 may have the effect of revising the place of use of this water right

Table 2. Proposed Source of Withdrawal.

Source Name	Parcel	Well Tag	Twp	Rng	Sec	QQ Q	Latitude	Longitude
City of Napavine Well #6	018082001000	AFT345	13N	02W	09	SW NW	46.599108	-122.907275

Table 3. Existing Source of Withdrawal.

Source Name	Parcel	Twp	Rng	Sec	QQ Q	Latitude	Longitude
Well #1, Betty Hamilton house	018050005000	13	02W	15	SE SE	46.606886	-122.909375
Well #2 West Coast Oil	018050016001	13	02W	15	SE SE	46.605189	-122.909792
Well #3 Main Well	018050016004	13	02W	15	SE SE	46.606578	-122.911367
Well#4 Polaris	017905004000	13	02W	15	NE SE	46.610608	-122.913172

Legal Requirements for Proposed Change

The following is a list of requirements that must be met prior to authorizing the proposed change in GWC 1726.

Public Notice

The applicant published notice for this project proposal in *The Chronicle* Lewis County once a week for two consecutive weeks beginning December 14 and ending December 21, 2007. The Department of Ecology received five letters of concern in response to this notice.

State Environmental Policy Act (SEPA)

A SEPA determination evaluates if a proposed withdrawal will cause significant adverse environmental impacts. A SEPA threshold determination is required for:

- 1) Surface water applications for more than 1 cubic feet per second (cfs). For agricultural irrigation, the threshold increases to 50 cfs, if the project isn't receiving public subsidies.
- 2) Groundwater applications requesting more than 2,250 gpm.
- 3) Projects with several water right applications where the combined withdrawals meet the conditions listed above.
- 4) Projects subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA).
- 5) Applications that are part of several exempt actions that collectively trigger SEPA under WAC 197-11-305.

This application does not meet any of these conditions and is categorically exempt from SEPA.

Statutory Requirements

Water Right Changes

RCW 90.03.380(1) states a water right put to beneficial use may be changed. The point of diversion, place of use, and purpose of use may be changed, as long as it would not harm or injure other water rights.

The Washington Supreme Court has held that Ecology is required to make a tentative determination of extent and validity of the claim or right when processing an application for change to a water right. This is necessary to establish whether the claim or right is eligible for change. (*R.D. Merrill v. PCHB and Okanogan Wilderness League v. Town of Twisp*.)

The holder of the right may change the manner or purpose of use. The Washington State Supreme Court held in *Merrill* that a water right holder may change the season of use when related to a change in the purpose of use of a water right. A change in the purpose of use can be approved only after the water has first been applied to beneficial use.

Same Body of Public Groundwater

RCW 90.44.100 allows Ecology to amend a ground water permit(or claim) to allow the user to construct a replacement or additional well at a new location outside of the location of the original well, or to change the manner or place of use of the water, if:

- (a) For replacement wells, the user must discontinue use of the original well and properly decommission the original well.
- (b) For additional wells, use from the original well can continue, but the combined total withdrawal from all wells must not enlarge the right.
- (c) Other existing rights must not be impaired.
- (d) The wells must draw from the *same body of public groundwater*. Sources in the same *body of public groundwater* are:
 - Hydraulically connected.
 - Have a common recharge (catchment) area.
 - Share a common flow regime.

INVESTIGATION

The material reviewed in support of this application included the following:

- The State Surface Water Codes, administrative rules, and policies.
- Department of Ecology's Water Right Tracking System (WRTS) database.
- Topographic and local area maps.
- Telephone interviews and e-mail correspondence from Karl Johnson, of Gray and Osborne, Inc., representing the City of Napavine.
- The City of Napavine's Draft Water System Plan Update, Gray and Osborne, May 2008.
- Notes from a site visit on March 5, 2012.
- Hydrogeologic memorandum written by Tammy Hall, licensed hydrogeologist, with Water Resources Southwest Regional Office, March 7, 2012.

Project Location and Site Description

The City of Napavine is situated in Lewis County, along Interstate 5, about six miles south of Chehalis. The town sits at the northern edge of the Napavine, Jackson, and Grand Prairies, exactly half-way between the cities of Tacoma and Portland, Oregon. Napavine lies between the Neuwaukum River and Stearns Creek.

The City of Napavine owns and operates a municipal water system (ID# 58200) that serves the town and surrounding areas. Information on Washington State Department of Health's website (Sentry) indicates the water system serves a residential population of 1,900 and a nonresidential population of 772 on 654 connections.

Napavine was originally a logging and sawmill center that once included six sawmills, a shingle mill, and two column factories. Other businesses included a general repair shop, two shoe shops, and a blacksmith. Napavine was incorporated as a town in 1913 and reincorporated as a City in the 1970's. The water system was built in 1955 and used Well 1 as its primary source until 1964, when Well 2 was drilled. Wells 3 and 4 were added in 1975 and 1994, respectively.

Significant water distribution system improvements were made in 2000.

Intent of Application for Change

The intent of this application is to transfer water rights associated with the Hamilton property to the City of Napavine. The City has agreed to purchase the Hamilton water rights pending approval of this transfer.

The original application requested to transfer GWC 1726 to the City's wells 2, 4, and 5. However, the City amended the application and the proposed point of withdrawal was changed to a new well, City of Napavine Well #6.

History of Water Use of GWC 1726

GWC 1726 was issued on January 14, 1954 to Frank B and Edith Hamilton. The certificate authorized 420 gpm and 114 ac-ft per year for irrigation of 57 acres, stockwater, and domestic supply. Surface Water Certificate (SWC) 5605, issued January 15, 1954, is supplemental (non-additive) to GWC 1726. It allowed diversion of 0.7 cubic feet per second (cfs) from the Newaukum River for irrigation of 70 acres.

Anecdotal information from the Hamiltons indicated they used the water right as authorized until around 1994. Records were not kept regarding how much water was being used.

After 1994, other uses began to occur. Water use from each of the groundwater sources continued until summer 2011 when the City of Napavine began providing water service. At least 2 of the 4 wells were also used to irrigate, but the surface water diversion was the main source for irrigation.

The Hamiltons provided statements of various activities that have taken place on their property involving water use throughout the years. Recent documented water uses include the following (Gray and Osborne, 2004):

- Public Water Supply to Hamilton, Betty Water System (ID#04767A), Water Facilities Inventory (WDOH, Sadie database) lists one well, one residence, and 5 non-residential connections.
- Water was sold in bulk to Sterling Breen Crushing, Inc., for a project to fill Hamilton property.
- The Hamiltons have raised various irrigated crops on their property, including alfalfa, hay, field corn, peas, potatoes, and potted pine trees. Surface water was the primary source.
- The Hamiltons have raised various stock on their property, including beef cattle, horses, pigs, and sheep. These livestock were shown regularly and bathed routinely.
- Uhlmann RV operated a business and used a separate, un-metered well.

- Water was sold in bulk to Northfork Construction Inc. for asphalt plant dust control and miscellaneous road cleaning.
- Five trailers on the property were supplied with water. Usage was not metered.

Tentative Determination of Extent and Validity of GWC 1726

The Washington Supreme Court holds that when processing an application for change to a water right, Ecology is required to make a tentative determination of extent and validity of the claim or right. This is necessary to establish whether the claim or right is eligible for change. (*R.D. Merrill v. PCHB and Okanogan Wilderness League v. Town of Twisp*).

Water use on the Hamilton property was from four wells with varied uses. In written statements, the Hamiltons have provided estimates of water use on their property. Based on documentation provided, Ecology's tentative determination was that GWC 1726 is valid for 140 gpm and 36 ac-ft of year-round use and 69 ac-ft per year for seasonal use (May 1 through September 30). This use is detailed below in Table 4.

Table 4. Summary of Hamilton water use data

<i>Use</i>	<i>Amount ac-ft/yr</i>
Group B water system/public water supply	2.89
Sterling Breen	17.68
Irrigation of 40 acres (seasonal, primarily surface water under SWC5605)	69.13
Stockwater	2.28
Uhlmann RV	2.97
North Fork Construction	8.84
Show stock bathing	0.15
Trailer residents	1.12
Total	105

(Gray and Osborne, 2004)

The remaining 10 ac-ft and 310 gpm under this right has been relinquished back to the state for non-use without "sufficient cause" as defined by statute (Chapter 90.14 RCW).

Proposed Use

The purpose of use will be Municipal Supply.

Determination of De Facto Change of GWC 1726

In some situations, changes to historic uses associated with water rights have been made in the diversion or use of water without first obtaining authorization for the changes pursuant to chapters 90.03 and 90.44 RCW. Such unauthorized changes to existing water rights are commonly referred to as "*de facto*", or a change that has already occurred.

When evaluating unauthorized changes to water rights, Ecology generally considers beneficial use to be the measure of the right, even if some attributes of the right may not be consistent with the current authorization.

Use of water in a manner inconsistent with one's water right authorization may not result in forfeiture or abandonment of that right, provided such use is beneficial and not wasteful. Consideration of unauthorized water use as representing beneficial use of the water right is determined on a case by case basis, through careful examination of the specific facts associated with the water right file.

The changes in beneficial use for the Hamilton water rights occurred when the Hamilton property became part of the Urban Growth Area (UGA) for the City of Napavine. At this time, land use changed from primarily agricultural to commercial. All water use after this change in land use has remained within the annual limits of the original water right. Considering the facts and circumstances of this specific situation, I determine that a *de-facto* change occurred in the use of GWC 1726.

Proposed Use

The proposed use is "Municipal Supply Purposes."

Other Rights Appurtenant to the Place of Use

The City of Napavine (System Id. No. 58200) encompasses around 640 acres and serves residential and commercial customers (Gray and Osborne, 2008). Groundwater withdrawals are authorized by two Water Right Certificates and four wells.

Details of the City's water rights are summarized in Table 5.

Table 5. The City of Napavine's Water Rights.

Certificate #	Source	Instantaneous Rate(Qi) GPM	Annual Quantity (Qa) ac-ft/year	Location: QQ-Q T. 13 N., R. 2 W.	
				Sec 34	Sec 35
G2-00101	Wells 1, 2, 4, & 5	265	138	NE NE	
G2-23113	Well 3	50	30		NW NW
Total		315	168		

System Demand and Water Use

The City of Napavine's current Water System Plan (Gray & Osborne, 2008) estimates average daily demand in 2012 to be 130,000 gallons a day or about 146.1 ac-ft/year. Based on projected demand, the City expects to have enough annual quantity to last until 2016.

Approving this change will enable the City to meet projected annual demand until about 2026. (Gray & Osborne, 2008)

Hydrologic/Hydrogeologic Evaluation

General Area Hydrogeology

The City of Napavine is in central Lewis County, about 33 miles south of the southern end of Puget Sound. The City sits in a structural basin that extends from the Willamette Valley in Oregon to British Columbia called the Puget Trough.

The City is situated on a relatively flat upland terrace formed during the Pleistocene, roughly 10,000 years ago. Near Napavine, two terraces exist above the Neuwakum River Valley. The terraces were formed when glacially fed streams discharged across the valley, eroding the fill and forming broad terraces of alluvium and glacial outwash materials. (Weigle and Foxworthy, 1962)

The younger, lower terraces are relatively flat. The older, upland plains have a more rolling surface marked by deep gullies extending back from the scarps. Landslides occur at many places along terrace scarps. (Weigle and Foxworthy, 1962)

All aquifers and streams are expected to be hydraulically connected.

The following units are found in the Napavine area:

- Logan Hill Formation. This unit comprises the upper terrace and can be up to 150 feet thick. The top 20 to 50 feet is a highly weathered, yellow to red clay with gravel. In this weathered zone, pebbles and cobbles are so highly altered that they easily break apart. Below the weathered zone, the unit consists of a heterogeneous mixture of gravel and sand with minor amounts of silt and clay.

The Logan Hill formation yields only small amounts of water from the upper weathered zone, but can produce moderately large amounts of water from the lower, un-weathered zone. (Weigle and Foxworthy, 1962)

- Newaukum terrace. This unit ranges from less than 20 to more than 100 feet thick. Groundwater yields for the Newaukum terrace unit is usually small because the unit is tightly cemented although in some areas, only a small portion of the unit is saturated.
- River alluvium of the Neuwakum River. The alluvium of the Neuwakum River consists predominantly of fine-grained materials. As expected, wells completed in this unit are relatively shallow and have low yields.
- Non-marine deposits. This unit underlies the terrace deposits (Logan Hills and Newaukum terrace) and river alluvium in the Neuwakum River Valley. This unit was deposited in a structural basin formed from activity during the Pliocene Epoch. The Newaukum artesian basin covers about 25 square miles.

Recharge to this unit is from precipitation that falls on the adjacent upland plains. In the Napavine area, the hydraulic gradient is enough to produce artesian pressures.

Preliminary Permit

A Preliminary Permit was issued to the City of Napavine on April 2, 2008 requiring drilling and testing of a new production well. This new production well, Well #6, is about 200 feet south of the Newaukum River about ½ mile south of the wells associated with the Hamilton property. The unit exposed at the ground surface at the well site is the Newaukum terrace (Weigle and Foxworthy, 1962)

See Attachment #1

Drilling Napavine Well #6 began on November 10, 2009 and the well was completed on March 4, 2010. Construction details are summarized below in Table 6.

Table 6. Construction details of City of Napavine Well #6

Well Tag	AFT345
Date Drilled	March 2, 2010
Well elevation (ft above mean sea level, msl)	240
Well diameter (inches, in)	8
Completed depth (ft below ground surface, bgs)	384
Elevation, ft below mean sea level (msl)	-144
Screened interval	346-379
Pumping capacity (gpm)	270
Hydrologic unit	Non-marine deposits Newaukum artesian aquifer

When the Newaukum artesian aquifer was penetrated, the water level rose and stabilized at about 19 feet below the top of the casing (Gray and Osborne, 2010). Based on the depth of the well and the elevation of the static water level, Well #6 is completed in the non-marine deposits of the Newaukum artesian aquifer.

Pump testing began on February 24 and ended February 26, 2010. The well was pumped at 270 gpm for 24 hours. At about 1,000 minutes (16.67 hours) into the test, the drawdown curve flattened out indicating a recharge boundary at distance. The estimated transmissivity of the aquifer, using early data is calculated at 7,425 gallons per day per foot of aquifer (gpd/ft) and 11,140 gpd/ft using data after 1,000 minutes of pumping (Gray and Osborne, 2010).

Hamilton wells

Information provided by Gray and Osborne (2004) indicates that groundwater use on the Hamilton property took place from four wells.

See Attachment #1

Well reports are only available for three of the four wells, Wells #1, #2, and #4. Well #3 was the main well, used primarily for the Group B water system. It's likely this well was also completed in the Newaukum terrace unit. Construction details of Wells #1, #2, and #4 are summarized in Table 7.

Table 7. Well construction details for Wells #2 and #4.

<i>Well</i>	<i>Depth</i>	<i>Static water level, ft bgs</i>	<i>Hydrologic unit</i>	<i>Production capacity</i>
Well #1, Betty Hamilton House	320	Artesian conditions when drilled	Newaukum artesian aquifer	120
Well #2, West Coast Oil	81	6	Newaukum terrace	25
Well #4, Polaris	44	11	Newaukum terrace	25

Same Body of Public Groundwater

When adding wells to groundwater rights, RCW 90.44.100 requires that the wells must draw from the *same body of public groundwater*. Based on Water Resources Program Policy 2010 (2007) wells that tap the *same body of public groundwater*:

- Are hydraulically connected.
- Share a common recharge (catchment) area.
- Share a common flow regime.

The wells used on the Hamilton property and City of Napavine Well #6 draw water from the same body of groundwater. The wells are hydraulically connected, share the same recharge, and common flow regime. Groundwater from all wells ultimately discharges to the Newaukum River.

Impairment Considerations

Effects to Area Water Users

Water right changes have greatest potential to affect wells completed in the same aquifer near the new point of withdrawal.

WAC 173-150-060 specifies impacts to “qualifying withdrawal facilities” fit the legal definition of impairment. This allows wells to be affected but impacts are not considered impairment. Qualifying withdrawal facilities are wells completed in the same aquifer as the new point of withdrawal. The well must span the aquifer’s entire saturated thickness and the pump elevation must allow variation in seasonal water levels.

This change will allow withdrawals of 140 gpm and 105 ac-ft per year from a well 379 feet deep. Only 39 ac-ft will be authorized for year-round use. The remaining 69 ac-ft is limited to seasonal use from May 1 through September 30.

A query of Ecology’s water right (WRTS) database identified three water right certificates within ½ mile of Well #6. The Schwarz well is shallow (25 ft deep) and is not expected to be affected by withdrawals from Well #6.

The Balmelli Dairy wells are completed at a comparable depth as Well #6, at a distance of about ½ mile. Pumping Well #6 will likely affect the pressure in the Newaukum artesian aquifer and lower the water level slightly, but not enough to affect well production. Therefore, impairment is not expected.

Details of these water rights are summarized in Table 8.

Table 8. Water right certificates within ½ mile of Well #6.

<i>Certificate</i>	<i>Name</i>	<i>Priority date</i>	<i>Purpose of use</i>	<i>Qi</i>	<i>Qa</i>	<i>Well depth</i>
114	Schwarz	5/1/1945	Irrigation of 40 acres	125	40	25
G2-23286	Balmelli Dairy	10/17/1974	Irrigation of 50 acres	135	100	305
G2-23288	Balmelli Dairy	10/17/1974	Stockwater Domestic Supply	100	34.6	325

Ecology records also identified the following in about one-mile from Well #6:

- Twenty surface water certificates and superseding certificates authorizing 7.25 cfs and 926 ac-ft per year for irrigation, stockwater, and domestic supply.
- Six groundwater certificates totaling 430 gpm and 74.7 ac-ft per year for irrigation and domestic supply.
- Seventy-three surface water and groundwater claims are registered for domestic supply, irrigation, and stockwater. The validity and exact location of wells under these claims is not known.
- Forty-four well reports are on file in Ecology's database.
 - Twenty-one are less than 100 feet deep.
 - Sixteen are between 100 and 200 feet deep.
 - Seven are between 200 and 300 feet deep.

Impacts to Surface Water

WAC 173-522 establishes instream flows for the Newaukum River at River Mile (RM) 4.1 in Section 9, T. 13 N., R. 2 W., about five miles downstream of the City of Napavine.

The proposed change will authorize groundwater withdrawals from four shallow wells completed in the Newaukum terrace unit to a deeper well completed in the Newaukum artesian aquifer. Although all wells are completed in the same body of public groundwater, wells in the Newaukum terrace unit have a more direct communication with flows in the Newaukum River. Therefore, this change will benefit streamflows in the Newaukum River.

Public Interest Considerations

Approving CG2-GWC1726 is not detrimental to the public interest and consistent with RCW 90.54 and WAC 173-522.

Consideration of Protests and Comments

In response to the public notice, Ecology received five letters of concern with regard to this proposed change. These letters are considered "letters of concern" instead of formal "letters of protest" because they were received after the 30-day protest period had expired. All parties expressed the same concerns:

- Approval of CG2- GWC1726 would result in impairment of their water rights.

- Approval of CG2- GWC1726 would result in impairment of surface water.
- GWC 1726 is not a valid water right in good standing and available for change.

The parties who expressed their concern regarding this proposed change are listed in Table 9.

Table 9. Concerned parties regarding CG2-GWC1726.

Concerned Party	Date of letter
Tracy & Kathleen Spencer	April 1, 2010
Virgina Breen	March 25, 2010
Tammy Baker & Daniel Smith	March 25, 2010
Harvey & Judy Breen	March 25, 2010
Tammy Baker	March 18, 2010

Potential to impair other water rights

It is not likely that approval of this proposed change will result in impairment of other water right holders. Most area wells are completed in the shallow aquifer system; either the Newaukum terrace or river alluvium. The proposed new point of withdrawal, City of Napavine Well #6 is completed in the Newaukum artesian aquifer.

The well completed in the Newaukum artesian aquifer closest to Napavine Well #6 is about ½ mile away. Although pumping in Well #6 will likely affect the pressure in the Newaukum artesian aquifer, it is not expected to interfere with production of the wells.

Potential to impair surface water

It is not likely that flows in the Newaukum River or other surface water streams should be affected by this proposed change. It is likely that flows in the Newaukum River will benefit from this change since shallow wells associated with this water right will no longer be used. Shallow wells have a more direct connection with the Newaukum River.

Extent and validity of GWC 1726

Changes from an authorized water right use to other uses does not necessarily result in forfeiture or abandonment of that right, provided such use is beneficial and not wasteful. When evaluating unauthorized changes to water rights, Ecology generally considers beneficial use to be the measure of the right, even if some attributes of the right may not be consistent with the current authorization.

Based on Ecology's evaluation, it appears that a "de facto" change in water use occurred around 1995 when land use began to change from agricultural to more commercial. All water use after this change in land use has remained within the annual limits of the original water right.

Based on the information provided, 140 gpm and 36 ac-ft will be approved for year-round use. The remaining 69 ac-ft is authorized for seasonal use, May 1 September 30.

Determined Future Development Plan (DFDP)

RCW 90.14.140(2)(c) states that a water right not used for more than 5 years is not relinquished if it is claimed for a determined future development to take place within 15 years of the last beneficial use of water under the water right.

In order to qualify as a DFDP, a determined future development plan must satisfy a series of tests as established in *R.D. Merrill Company v. Pollution Control Hearings Board*; *City of Union Gap and Ahtanum Ridge Business Park LLC v. Washington State Department of Ecology*; and *Protect Our Water v. Islanders for Responsible Water Management (Interveners)*, *State of Washington, Department of Ecology*, and *King County Water District No. 19*:

- The project must be sufficiently complex as to require more than 5 years to complete;
- The plan must be determined and fixed within five years of the last beneficial use of the water;
- The party exercising the plan must have equity in the water right;
- The plan must remain fixed, and;
- Affirmative steps must be taken to implement the plan within 15 years.

In December of 2003, the City of Napavine and the Hamiltons entered into a written agreement to purchase water rights associated with the Hamilton property. This purchase would take place following their successful transfer to the City from this proposed change. This agreement qualifies as a DFDP.

RECOMMENDATIONS

Based on my investigation and conclusions, I recommend CG2- GWC1726 be approved for the amount listed below. Approval of this application is subject to the provisions beginning on Page 2.

Purpose of Use and Authorized Quantities

The amount of water recommended is a maximum limit. The water user may only use that amount of water within the specified limit that is reasonable and beneficial:

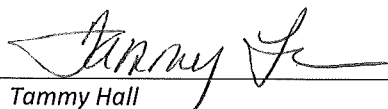
- 140 gpm
- 36 ac-ft, year round use
- 69 ac-ft seasonal use, May 1 to September 30.
- Municipal supply

Point of Diversion

- SW¼ NW¼, Section 9, Township 13 North, Range 2 W.W.M.

Place of Use

- As described on Page 1 of this Report of Examination.


Tammy Hall

4/17/2012
Date

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References

Gray and Osborne, Inc., 2004, City of Napavine Application for change/Transfer of Water Rights Numbers 1726A (CWRIS#G2-02468) and 5605 (CWRIS#S2-11592), November 2004.

Gray and Osborne, Inc., 2008, City of Napavine, Lewis County, Washington, Water System Plan, May 2008.

Gray and Osborne, Inc, 2010, Preliminary Permit (GWC) 1726, Report of Drilling and Testing Results, City of Napavine, Lewis County, Washington G&O #09239, April 14, 2010.

Weigle, J.M. and Foxworthy, B.L., 1962. Geology and ground-water resources of west-central Lewis County, Washington. Washington Division of Water Resources, Water Supply Bulletin No. 17. 78 p.

